SYSTEM FOR PROVIDING AN INTERFACE FOR A GAMING DEVICE

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present application claims priority to U.S. Provisional Application Serial No. (Not Assigned), filed September 11, 2003 (Attorney Docket No. 60,518-169) and is a continuation-in-part application of U.S. Patent Application Serial No. 09/967,571. filed September 28, 2001.

FIELD OF THE INVENTION

[0002] The present invention relates generally to gaming machines, and more particularly, to a system and method for providing a player interface to a player of a gaming machine.

BACKGROUND OF THE INVENTION

[0003] The growth and competition in the casino gaming market in recent years and the increasingly sophisticated and complex technology being integrated into the gaming environment, at the individual game, casino management, and auditing levels, presents both challenges and opportunities to game manufacturers, gaming establishment operators, and regulatory agencies. The technological capabilities and requirements of, for example, advanced electronic games, multi-site gaming operations, detailed player tracking, wide area progressive jackpots, and various alternatives to the use of currency and coins by players, all present a potentially huge pool of ever-changing data which can be of great value to casino operators (from a management standpoint) and to regulators from an audit/compliance standpoint.

[0004] One area that has received a lot of attention in recent years has been providing added bonuses or incentives to players of electronic gaming machines, such as video slot machines video poker machines. An award may be selected at random or be based on a player's previous level of play. Once a player has met the selected criteria, the award in credits paid from the machine's hopper is released.

[0005] Players may also be given an incentive through a player tracking club. Usually, a player is identified during play by a player tracking ID card and/or a player identification number (PIN). The player tracking system tracks the player's play and awards player tracking points according to established criteria. The player tracking points may be redeemed for prizes, such as complimentary meals or merchandise.

[0006] Typically, the player track ID card is entered into a player ID card located on the electronic gaming machine. A separate, numeric key pad is used to enter the PIN. Furthermore, a separate display screen may be used to display information or instructions to the player.

[0007] However, standard systems are inflexible and do not provide the casino operator with the maximum benefit and advantages available from the information and systems now available.

[0008] The present invention is aimed at one or more of the problems as set forth above.

SUMMARY OF THE INVENTION AND ADVANTAGES

[0009] In one aspect of the present invention, a player tracking device for providing a player interface to a player of a gaming machine is provided. The player tracking device

is coupled to the gaming machine. The device includes a processor, an ID card reader, a display and a keypad. The ID Card reader is coupled to the processor. The display is coupled to the processor for displaying a bezel and information to the player. The keypad is coupled to the processor for receiving input from the player. The processor instructs the display to display instructions for inserting a player ID Card into the ID Card reader and for displaying cycling media.

[0010] In another aspect of the present invention, a device for providing an interface to a gaming machine for use by a user is provided. The player tracking device is coupled to the gaming machine. The device includes a processor, an ID card reader, a display, and a keypad.

[0011] In still another aspect of the present invention, a device for providing an interface to a gaming machine is provided. The device includes a processor, an ID Card reader coupled to the processor, a display coupled to the processor for displaying a bezel and information within the bezel. The device also including a keypad coupled to the processor for receiving input. The processor instructing the display to media.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] Other advantages of the present invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

[0013] Figure 1 is block diagram of a system for providing a player interface to a player of a gaming machine, according to an embodiment of the present invention;

[0014] Figure 2 is a block diagram of a gaming machine for use with the system of Figure 1;

[0015] Figure 3A is a diagrammatic illustration of an interface, according to an embodiment of the present invention;

[0016] Figure 3B is a diagrammatic illustration of an interface, according to an embodiment of the present invention;

[0017] Figure 3C is a diagrammatic illustration of an interface, according to an embodiment of the present invention; and,

[0018] Figure 3D is a diagrammatic illustration of an interface, according to an embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

I. Overview

[0019] With reference to the drawings and in operation, the present invention provides a system 10 and method 50, 52, 54, 56, 58 for providing a player interface to a player of a gaming machine 12. Gaming machines 12 may include, but are note limited to electronic gaming machines or EGM (such as video slot, video poker machines, or video arcade games), electric gaming machines, virtual gaming machines, e.g., for online gaming, and an interface to a table management system (not shown) for table games.

II. Gaming System

[0020] In one embodiment, the system 10 and method 50, 52, 54, 56 may be embodied or implemented via an entertaining management and monitoring system 14 which is shown in block diagram form in Figure 1. The entertainment and monitoring system 14

may include may additional functions such as, real-time multi-site, slot accounting, player tracking, cage credit and vault, sports book data collection, Point of Sale (POS) accounting, keno accounting, bingo accounting, and table game accounting, a wide area progressive jackpot, and electronic funds transfer (EFT). Such systems are disclosed in U.S. Patent Application Serial No. 09/967,571. filed September 28, 2001 and U.S. Provisional Application Serial No. (Not Assigned), filed September 11, 2003 (Attorney Docket No. 60,518-169), both of which are hereby incorporated by reference.

[0021] As shown, the system 10 may include a plurality of gaming machines 12. In the illustrated embodiment, eight electronic gaming machines 12A-12H are shown. However, it should be noted that the present invention is not limited to any number or type of machines 12. In one embodiment, the machines 12 are organized into banks (not shown), each bank containing a plurality of machines 12. Other types of gaming machines which may be included (see above) are indicated with reference number 12I.

[0022] The gaming machines 12 are connected via a network 16 to one or more host computers 18, which are generally located at a remote or central location. The computer 18 includes a computer program application 20 which maintains one or more databases 22. In one embodiment, the database(s) are Oracle database(s).

[0023] The computer program application 20 and databases 22 may be used to record, track, and report accounting information regarding the gaming machines 12 and players of the gaming machines 12. Additionally, the computer program application 20 and

databases 22 may be used to maintain information related to player tracking accounts (see below).

[0024] In general, the gaming machines 12 are playable by a player 24. The player 24 may select one of the gaming machines 12C to play and insert a coin, credit, coupon, and/or player tracking card (not shown) into the chosen gaming machine 12C. Generally, the gaming machines 12C have an associated number of credits or coins required in order to play. In the case of video slot or poker games, the game is played and an award in the form of credits may be awarded based on a pay table of the gaming machine 12.

[0025] With reference to Figure 2, a block diagram of a suitable electronic gaming machine 12C is shown.

[0026] The machine 12C comprises a game controller 26, or central processing unit (CPU), a coin-bill management device 28, a display processor 30, a RAM 32 as a memory device and a ROM 34 (generally provided as an EPROM). The CPU 26 is mainly composed of a microprocessor unit and performs various calculations and motion control necessary for the progress of the game. The coin-bill management device 28 detects the insertion of a coin or a bill and performs a necessary process for managing the coin and the bill. The display processor 30 interprets commands issued from the CPU 26 and displays desirable images on a display 36. The RAM 32 temporarily stores programs and data necessary for the progress of the game, and the ROM 34 stores, in advance, programs and data for controlling basic operation of the machine 12C, such as the booting operation thereof, game code and graphics.

[0027] Input to the gaming device 12C may be accomplished via mechanical switches or buttons or via a touchscreen interface (not shown). Such gaming machines 12 are well known in the art and are therefore not further discussed.

[0028] The player 24 is identified via the player tracking card and/or a player identification number entered into player tracking device 38 at each gaming machine 12 (see below). Player tracking accounts may be used, generally, to provide bonuses to a player, in addition to the award designated by, in the case of a video slot or poker machine, the gaming machine's 12 paytable. These bonuses may be awarded to the player 24 based a set of criteria, including, but not limited to, a) the player's play on the machine 12C, b) the player's overall play, c) play during a predetermined period of time, and d) the player's birthday or anniversary, or e) any other definable criteria. Additionally, bonuses may be awarded on a random basis, i.e., to a randomly chosen player or randomly chosen game 12. Bonuses may also be awarded in a discretionary manner or based on other criteria, such as, purchases made at a gift shop or other affiliated location.

[0029] In one embodiment, the player tracking device 38 includes a processor 40, a player identification card reader 42 and/or a numeric keypad 44, and a display 46. In one embodiment, the display 46 is a touchscreen panel and the numeric keypad 44 is implemented thereon.

[0030] The player 24 may be identified by entry of a player tracking card into the player identification card reader 42 and/or entry of a player identification number (PIN) on the numeric key pad 46. The play tracking device 38 may also be used to communicate

information between the computer 18 and the corresponding gaming machine 12C. The player tracking device 40 may also be used to track bonus points, i.e., incentive points or credits, downloaded from the computer 18.

III. Player Incentives - Bonus Points

[0031] In one aspect of the present invention, the bonuses are awarded as bonus points. In one embodiment, the bonus points are incentive points. In another embodiment, the bonus points are credits.

[0032] The incentive points may converted to credits using a predetermined ratio. The predetermined ratio may be 1 or any other desired ratio. The predetermined ratio may also be varied based on determined criteria, e.g., the gaming machine 12 being played, the player, or the time of day. Incentive points may be designated as cashable or non-cashable. As described below, the incentive points in a player account may be downloaded to one of the gaming machines 12 for play.

[0033] Incentive points stored in the player account may be designated as cashable or non-cashable. In one embodiment, the player account may include only cashable incentive points. In another embodiment, the player account may include only non-cashable incentive points. In a third embodiment, the player account may include both cashable and non-cashable incentive points.

[0034] In still another embodiment, the player account may include incentive points, cashable and/or non-cashable, and credits, cashable and/or non-cashable.

[0035] Cashable credits, or incentive points converted into credits, may be downloaded to a gaming machine 12. When the player has finished playing the gaming machine 12,

any remaining credits may be cashed out, i.e., retrieved as coins or placed on a printed ticket or player tracking card for redemption or play on another gaming machine 12.

[0036] Non-cashable credits must be played. When the player stops playing gaming machine 12C, any remaining non-cashable credits which were downloaded to the gaming machine 12C are either lost or uploaded back to the player account (see below).

[0037] The database 22 tracks the player account for each player in the player tracking system. In the illustrated example, the following is tracked for each player: account number, incentive points, name, cashable credits and non-cashable credits. Thus in this example, bonus points in the form of incentive points, cashable credits and non-cashable credits may be awarded.

[0038] In one aspect of the present invention, bonus points are awarded via electronic vouchers, i.e., records in the database 22. A voucher is created each time bonus points are awarded. Each voucher has a voucher number and an amount (in the case a dollar or credit amount). Each voucher is assigned to a player account and includes the player account number to which it is assigned. Each voucher may include additional parameters or fields based on the needs of the system 10. For example, an expiration date could be included which gives a date at which the respective voucher expires. The voucher may also designate the bonus points as cashable or non-cashable.

[0039] In one aspect of the present invention the computer 18 may create a first voucher and assign a first number of bonus points to the first voucher. The computer 18 may also create a second voucher and assign a second number of bonus points to the second voucher. The first and second vouchers may be assigned to a player account.

Each voucher has a parameter. The parameter of the first voucher has a first value and the parameter of the second voucher has a second value.

[0040] In one embodiment, the bonus points are incentive points which may be converted to credits and downloaded to the gaming machine 12C.

[0041] In another embodiment, the bonus points are credits which may be downloaded to the gaming machine 12C.

[0042] In one embodiment, the gaming machine 12C may display to the player 24 a list of the vouchers which have been assigned to their player account. The player 24 may then indicate at least one voucher to download. The list may displayed whenever appropriate, for example, when the player 24 is identified to the system 10, when the player requests the list (through a menu system), when a new voucher has been created, or any other suitable time. In one embodiment, the list may be displayed on the display 36. In another embodiment, the list may be displayed on the player tracking device display 44.

[0043] The first and second values of the parameters of the first and second vouchers 48 may be equal or different. For example, in one embodiment the parameter relates to an expiration date of the respective voucher. The expiration date may be a function of the date of the voucher was created. Thus, the expiration dates of the first and second vouchers may be different if the vouchers were created on different days or may be the same if created on the same day.

[0044] In another embodiment, the parameter is one of cashable and non-cashable. The computer 18 may designed a voucher as cashable or non-cashable. Typically, this is defined by predefined criteria based on how the voucher was created.

[0045] If the bonus points for a specific voucher are incentive points, the incentive points may be converted to credits prior to downloading to the gamine machine 12C. As described above, this is done using a predetermined ration which may be 1 or some other ratio.

[0046] In one embodiment, the gaming machine 12 may provide an indication to the player 24 when the first voucher or second voucher has been assigned to the player account. For example, the indication may be an audio signal and/or a visual signal.

[0047] In one embodiment, the parameter may be an expiration date of the respective voucher. Each voucher may also include a second parameter designating the respective bonus points as being cashable or non-cashable.

[0048] In one embodiment, the computer 18 may convert the first number of bonus points to a first number of credits and download the first number of credits to the player tracking device 38.

[0049] In another embodiment, the gaming machine 12 has a credit meter for tracking available credits for play of the gaming machine by the player 24. The computer 18 may convert the first number of bonus points to a first number of credits and download the first number of credits to the credit meter.

[0050] In one embodiment, the parameter may be one lump-sum and pay for play. The computer 18 may convert the first number of bonus points to credits and download the credits to the credit meter if the first voucher is designated as lump-sum.

[0051] In one embodiment of the present invention, the gaming machine 12 is capable of accepting a variable wager. The variable wager has a maximum wager value or MAX BET. In one embodiment, the maximum wager value is equal to the lesser of a value defined by the configuration of the gaming machine 12, a value defined by the incentive setup, or the remaining balance of bonus points. The computer 18 converts the first number of bonus points associated with the first voucher to a first number of credits and downloads the first number of bonus points to the player tracking device 38 as credits. The gaming machine 12C allows the player 24 to place a wager and play the gaming machine 12C. The gaming machine 12C decrements the wager from the credit meter, decrements the maximum wager from the player tracking device 38, and credits the maximum wager to the credit meter in response to the player 24 playing the gaming machine 12C.

[0052] In another embodiment of the present invention, the player account is credited with a first number of bonus points. The bonus points are downloaded to the player tracking device 38 as credits. The player 24 places a wager and the gaming machine 12 is played. If the total of the player's wagers (over one or more games) is greater or equal to a predetermined value, i.e., a predetermined match play amount, then the match play amount is decremented from the player tracking device 38 and the match play amount is credited to the credit meter. Otherwise, the player 24 may place another wager.

[0053] One suitable system for crediting a player with bonus points is described in U.S. Patent Application Serial No. (Not Assigned), filed concurrently with the present application (Attorney Docket No. 60,518-159), which is hereby incorporated by reference.

IV. The Player Tracking Device Interface

[0054] With reference to Figure 2, in one aspect of the present invention, the player tracking device 38 provides an interface for interaction between the player 24 or other user (not shown), such as a slot employee or slot technician, and the host computer 18, i.e., player tracking system. As discussed above in one embodiment, the display 44 is a touchscreen display which allows information to be displayed to the player 24 or user, as well as provide interactive buttons or menus for receiving input. Furthermore, the keypad 46 may be implemented on the display 46 and displayed on the display 44 as appropriate or required.

[0055] In one aspect of the present invention, the display 44 displays a bezel 50. Other information may be displayed within the bezel 50.

[0056] In one embodiment, the bezel 50 includes a modifiable parameter for indicating information, e.g., to a slot employee. The modifiable parameter may be color, but other parameters may be used. For example, the bezel may blink, change colors, or cycle in some other manner to convey information.

[0057] In one embodiment, the modifiable parameter may be one of (at least) first and second values which are indicative of predetermined criteria of the player 24. For

example, the first value (such as the color red) may be indicative of a hot player and the second value (such as the color blue) may be indicative of a mild player.

[0058] If the game machine 12C is not currently being played, the processor 40 may instruct the display 44 to display instructions for inserting a player ID Card into the ID card reader 42. Additionally, the display may other media, e.g., audio and/or video and/or pictures, in a cyclical manner.

[0059] The types of media that may be displayed on the player tracking device 38 include, but are not limited to local attractions, general in-house advertisements, paid advertisements by local merchants, show reviews, promotional alerts, security alerts, community service advisories, emergency directions, featured videos, a current Keno board.

[0060] With specific reference to Figure 3A, a first sample screen image 52A is shown. The screen image 52A is shown within the bezel 50 and includes a title bar 54 with instructions to "insert your card", a player's club welcome image 56, an advertising media 58, and a plurality of buttons 60.

[0061] The player's club welcome image 56 may be player selectable which may cause the player tracking device 38 to display a screen or series of screens for allowing the player to enroll in the player tracking system. Alternatively, selection of the player's club welcome image may page a host (not shown) who could enroll the player in the player tracking club. The host may be enroll the player using a remote device (not shown).

[0062] The advertising media 58 may include an image and/or (live or streaming) video and/or audio media.

[0063] The buttons 60 allow the player 24 to interact with the host computer 18. For example as shown in Figures 3A and 3B, buttons may be provided which allow the player 24 to page a host (a slot host or a drink hostess), page security (or security employee), or to navigate to a main menu (not shown).

[0064] In another aspect of the present invention, the player tracking device 38 allows the player 24 to interact with the player tracking system to view information and to interact with the player's account. For example with specific reference to Figure 3B, once the player 24 has been identified to the player tracking system, the display may a bonus point total, a session bonus point total, and an available cash play.

[0065] Furthermore, as discussed above, the player tracking device 38 may display a list of vouchers assigned to the player 24. The player 24 may be allowed to select a voucher to download.

[0066] In another aspect of the present invention, the player tracking device 38 allows the player 24 to send and receive messages to a spouse, friend, or slot employee. The messages may be text and/or video and/or audio messages.

[0067] In another aspect of the present invention, the player tracking device 38 allows the player 24 to conference call a spouse, friend, or slot employee. The conference call may be text and/or video and/or audio messages.

[0068] In another embodiment, the, the media containing a machine glossary of terms.

[0069] In still another embodiment, the media may include a live video feed from a selected security camera.

[0070] With specific reference to Figure 3C, in still another embodiment, the player tracking device 38 may provide a live video feed 62 of a remote location (not shown). For example, the remote location may be a childcare facility at which a child of the player 24 may be enrolled. In one embodiment, the player tracking device 38 for confirms that a child of the player 24 is enrolled at the child care facility through a personal identification number (PIN). If the PIN entered on the numeric or alpha-numeric keypad 46 is valid, the live feed 62 is displayed.

[0071] With reference to Figure 3D, in a further aspect of the present invention, the player tracking device 38 may alert a technician in response to an error condition of the gaming machine 12. The player tracking device identifies the technician by an ID card inserted into the ID card reader and/or an identification number entered on the keypad 46. In one embodiment, the tracking device 38 may display technical instructions, e.g., repair instructions, or debugging information to the slot technician. The technical instructions or debugging information may be in the form of text, video, and/or audio.

[0072] In another embodiment, the keypad 46 may be used for entering repair or verification codes by user. With specific reference to Figure 3D, the keypad 46 may be used to enter verification codes related to hopper fills or jackpot fills.

[0073] In one embodiment, the verification codes relate to the gaming machine 12 which is coupled to the player tracking device 38 on which the code is entered. In another embodiment, a verification code may be related to another of the gaming machines 12.

[0074] Obviously, many modifications and variations of the present invention are possible in light of the above teachings. The invention may be practiced otherwise than as specifically described within the scope of the appended claims